Ohio EPA

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To Reising Co.	From OEPA
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3226

August 28, 2000

Mr. Johnny Reising
U S. Department of Energy Fernald Area Office
P.O. Box 538705
Cincinnati, OH 45253-8705

Re: COMMENTS - AWR REMEDIAL DESIGN PACKAGE

Dear Mr. Reising:

Ohio EPA has reviewed DOE's submittal, "Silos 1 and 2 Accelerated Waste Retrieval Remedial Design Package " Attached are our comments on the document.

If you have any questions, please contact me at (937) 285-6466.

Sincerely,

Thomas A. Schneider
Fernald Project Manager
Office of Federal Facilities Oversight

cc: Jim Saric, U.S. EPA
Terry Hagen, FDF
Mark Shupe, HSI GeoTrans
Francie Hodge, Tetra Tech EM Inc.
Ruth Vandergrift, ODH

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OHIO EPA COMMENTS ON
SILOS 1 AND 2 ACCELERATED WASTE RETRIEVAL (AWR) PROJECT
REMEDIAL DESIGN PROJECT
June 2000

General Comment

1. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Comment Pg #: Line #: Code: C
Original Comment #:
Comment: The lack of continuity in the document is reflected in the absence of a consistent page number system. All future submittals at a minimum must include a consistent page numbering system. This makes for easier reviews and comment resolution. The lack of such a system reflects upon the piece meal nature of the document as a whole and the number of inconsistencies found within.

2. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Comment Pg #: Line #: Code: C
Original Comment #:
Comment: The majority of Ohio EPA's comments have been expressed during the numerous meetings we have had with DOE and it's contractors regarding the AWR. It is disappointing to see that our efforts to clarify our concerns during those meetings were apparently fruitless. We expect that providing our comments in writing will ensure their inclusion in the next revision of the AWR document.

Section 1.0, Introduction

3. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 1.3.4 Pg #: 4 Line #: Code: C
Original Comment #:
Comment: The section should refer to the recently signed Record of Decision Amendment rather than the original ROD.

Section 2.1, Process Description

4. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 3.0 Pg #: Line #: Code: C
Original Comment #:
Comment: Despite numerous comments by Ohio EPA during previous meetings expressing our concern about the Decant Sump Tank monitoring and retrieval implementation, very little information is provided. The document needs to be revised to provide a more detailed discussion of the Decant Sump Tank integrity, design, monitoring, early retrieval, final retrieval, material disposition, etc.

5. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 4.5 Pg #: Line #: Code: C
Original Comment #:
Comment: Ohio EPA does not believe the proposed sampling scheme is most appropriate. The use of a percussion hammer-coring machine within the single shelled tanks is not acceptable. The number of entry and removals required to get an adequate sample volume present a substantial risk for release of contaminants within the TTA. This would create an unacceptable situation and most likely not be possible to remedy prior to final D&D. Additionally, previous efforts at sampling the silos show how difficult coring can be. Coring will only be more difficult following the slurry operation thus resulting in very low recovery rates and requiring more entry and removals. DOE should re-evaluate the proposed sampling method. A preferred method would be a valving system to allow take-off of samples during the retrieval process into pre-staged drums.

6. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 4.5 Pg #: Line #: Code: C
Original Comment #:
Comment: Will a separate shielding system be designed for the drummed sample material? Leaving the drums within the TTA would seem to present substantial exposure issues for workers in the area.

7. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 4.5 Pg #: Line #: Code: C
Original Comment #:
Comment: The detailed Sampling Plan for collecting removed silo materials must be included within the Remedial Design Package or the Remedial Action Plan Package. The Plan should include details on justification for volume of sample needed, method, QA/QC, containerization, storage and secondary wastes. As modifications to the sampling approach require changes to the system design at least minimal information on sampling must be included in the RD.

8. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 6.0 Pg #: Exhibit 6-1 Line #: Code: C
Original Comment #:
Comment: The figure is not readable. Provide a readable version of this exhibit.

9. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 7.0 Pg #: Line #: Code: C
Original Comment #:
Comment: The document fails to include sufficient detail on the FSMS. At what point prior to implementing FSMS will the agencies be provided a Plan detailing the FSMS activities, goals and objectives?

10. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 7.0 Pg #: Line #: Code: C
Original Comment #:
Comment: The text states that the "FSMS will utilize the exact model of equipment used in SWRS....". Some lattitude in this specification should be added. If exact models for four phases are not available, the project would have to be shut down based on this sentence. Suggest rewording.

11. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 8.1 Pg #: Line #: Code: C
Original Comment #:
Comment: Though the use of a fixative spray is mentioned no performance measures or criteria for the product or application are provided. The section go so far as to suggest multiple layers may be needed. Additional detail is required regarding the specifics of the fixative as well as the criteria for determining an acceptable coating has been applied.

Section 2.2, Process Control Plan

12. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Exhibit 1-1 Pg #: Line #: Code: C
Original Comment #:
Comment: Shouldn't the diagram include a feedback from the BOP to the EMMA and RCS? For example during alarm conditions the BOP shuts down EMMA?

13. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Process Control Table Pg #: Line #: Code: C
Original Comment #:
Comment: The process control should be revised to include an input from the Decant Sump Tank sensors to alarm and shut down retrieval operations.

14. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Process Control Table Pg #: 2 Line #: Code: C
Original Comment #:
Comment: Allowing 0.5 feet of waste to accumulate in the TTA sump prior to alarming is unacceptable. The alarm should be set at 1 inch of liquid maximum. Corrective action should be initiated upon alarm.

15. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.3 Pg #: Set Point Table (1 of 6) Line #: Code: C
Original Comment #:
Comment: Function "Monitor and Control Silo Pressure" has a high set point of 0.5" WG.

Over pressurization of the silos should be avoided by setting a lower set point. The engineered enhancements, namely the RCS, should prevent over pressurization of the silos.

16. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.3 Pg #: Set Point Table (2 of 6) Line #: Code: C
Original Comment #:
Comment: "Monitors Breakthrough of Carbon Bed XX" appears to state that response to the alarm will be adjustable over operating phases. An alarm set point should be set for the duration of the process for consistency. The alarm setpoint should be based on the design efficiency (high alarm) and off-site impact (high-high alarm).

17. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.3 Pg #: Set Point Table (3 of 6) Line #: Code: C
Original Comment #:
Comment: Several entries in this table are not readable. Provide readable page.

18. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.3 Pg #: Set Point Table (3 of 6) Line #: Code: C
Original Comment #:
Comment: Provide justification and methodology for the stack set point IS-STK-20-001.

19. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Process Control Table Pg #: 4 Line #: Code: C
Original Comment #:
Comment: Is it correct to assume that, the low set point for the pressure across filter would indicate a failure in the filter and require immediate corrective action? If so please clarify on the table.

20. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.3 Pg #: Set Point Table (5 of 6) Line #: Code: C
Original Comment #:
Comment: "TTA Area Radiation Monitor" . What is the TTA Area? DOE 5400.5 states that radon concentrations should not exceed 100 pCi/L on-site. The high set point should reflect 100 pCi/L not 800 pCi/L.

Section 3.0, Sampling and Analysis

21. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 1.3 Pg #: 2 Line #: Code: C
Original Comment #:
Comment: The CSL should be approved by Flour-Fernald to ensure that the CSL meets

the requirements outlined in the SCQ.

22. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.2 Pg #: 4 Line #: 1 Code: E
Original Comment #:
Comment: Change "...*rare* being met." to "...*are* being met.".

23. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.2 Pg #: 4 Line #: Code: C
Original Comment #:
Comment: The text states that "mitigation measures and corrective actions will be implemented accordingly". What, specifically, will the mitigation measures and corrective actions be?

24. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1.3 Pg #: Line #: Code: C
Original Comment #:
Comment: This is obviously an inadequate level of detail for the sampling. The Sampling Plan for the residues must be included with in the Remedial Action Plan Package submittal.

25. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.2 Pg #: General Comment Line #: Code: C
Original Comment #:
Comment: FWENCO needs to be sure that the QC stated in this RD are consistent with the SCQ.

26. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.2.4 Pg #: 5 Line #: Code: C
Original Comment #:
Comment: How will a field duplicate be performed on an air sample? Revise text accordingly.

27. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 3.2.1 Pg #: 8 Line #: Code: C
Original Comment #:
Comment: Switching the sample frequency from bi-weekly to monthly will need to be approved by USEPA and OEPA.

28. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 3.3 Pg #: 9 Line #: Code: C
Original Comment #:
Comment: Specifically identify where the sample storage drums will be stored.

29. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 4.1.1 Pg #: 11 Line #: Table 4-1 Code: C
Original Comment #:
Comment: If the WAC for Ra-226 is 100 pCi/L why is screening limit set at 185 pCi/L?

30. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 4.3 Pg #: Line #: Code: C
Original Comment #:
Comment: As stated in a previous comment, Ohio EPA does not think the proposed sampling is appropriate. Our concerns relate to recovery rate, spill probability and tank integrity.

31. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 5.6.2 Pg #: 19 Line #: Code: C
Original Comment #:
Comment: How will ASL E quality data for radon emissions from the stack be met?.

32. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 5.6.2 Pg #: 19 Line #: Code: C
Original Comment #:
Comment: Data validation should be performed consistent with Flor-Fernald SCQ.

33. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Appendix D Pg #: A-7 Line #: Code: C
Original Comment #:
Comment: Specifically state the method, i.e. alpha spectroscopy, and associated detection limits.

34. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Appenid E Pg #: A-8 Line #: Code: C
Original Comment #:
Comment: The second paragraph in "II. Summary" should be deleted. It has nothing to do with this section.

35. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Appendix E Pg #: A-8 Line #: Code: C
Original Comment #:
Comment: In section "IV Safety", change wastewater samples to air samples.

36. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Appendix E Pg #: A-9 Line #: Code: C
Original Comment #:
Comment: V. Procedure Guide A.7 What is the frequency of the intermediate readings? Parameters such as flow rate, temperature, and pressure should be electonically logged.

Section 4.0, Berm Excavation Plan

37. Commenting Organization: Ohio EPA Commentor: DSW
Section #: General Pg #: NA Line #: NA Code: C
Original Comment #:
Comment: Many of the response to comments made in review of the site prep package should have been carried over to this document and were not.

38. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 1.4 Pg #: Line #: Code: C
Original Comment #:
Comment: The proposed method for addressing soils where silo leakage may have occurred is unacceptable. The method will result in dilution of above WAC materials which is specifically prohibited by the SEP and WAC attainment plans. Removal of the soils prior to WAC determination is not acceptable. If any evidence of silo leakage is present, physical soil samples should be collected and analyzed for WAC criteria prior to soil removal. Based upon the sample results the soil may be removed and dispositioned as appropriate.

39. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.3 Pg #: Line #: Code: C
Original Comment #:
Comment: This section references the height differential of 10 feet. However other sections of the report reference an acceptable differential of 5 feet. Clarity should be provided regarding the acceptable differential to be implemented in the field. Then the document should be revised throughout to be consistent with the agreed upon criteria.

40. Commenting Organization: Ohio EPA Commentor: DSW
Section #: 2.4 Pg #: 6 Line #: NA Code: C
Original Comment #:
Comment: The statement that "A few culverts cross..." was addressed in response to comment #6 (DOE-0674-00) however no change was made to the statement in this document. Laso not that it appears as though 3 rather than 2 culverts cross the perimeter road. Please revise to state how many culverts cross the road.

41. Commenting Organization: Ohio EPA Commentor: DSW
Section #: 2.4 Pg #: 6 Line #: NA Code: C
Original Comment #:
Comment: This states that "These control measures are outlined in greater detail in the Stormwater Drainage Plan (Document No. 40170-625-P622-17)". This document must be included as part of the environmental control plan for review. When included, please refer to by its name rather than

document number.

42. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Drwng 11FCD004 Pg #: Line #: Code: C
Original Comment #:
Comment: As stated during several previous meetings, it is unclear how the sediment traps will function. Additional detail regarding their purpose and function must be provided.

43. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Drwng 11FCD006 Pg #: Line #: Code: C
Original Comment #:
Comment: During previous meeting we had discussed the placement of silt fence upgradient of the concrete track as well as the pivot point to keep these surfaces free of sediment. The drawing does not indicate this silt fence.

44. Commenting Organization: Ohio EPA Commentor: DSW
Section #: 2.4 and drwg 11FCD009 Pg #: NA Line #: NA Code: C
Original Comment #:
Comment: In comment response #16 (DOE-0674-00), it is stated that detail information about the sediment basins would be included in the Remedial Design Package. No such information could be found in this document. The sediment traps appear in the southwest corner of the drawing, but there is no information on surface water flow, drainage area, etc.

45. Commenting Organization: Ohio EPA Commentor: DSW
Section #: Drwg 11FCD009 Pg #: NA Line #: NA Code: C
Original Comment #:
Comment: There is no indication of surface water flow around silt fences, sheet flow, etc.

46. Commenting Organization: Ohio EPA Commentor: DSW
Section #: Drwg 11FCD007 & 008 Pg #: NA Line #: Note 4 Code: C
Original Comment #:
Comment: Please add to this and other similar notes on the drawings that hthe berm height must be maintained at 5' +/- 1' higher than the level of waste in the silos at all times.

47. Commenting Organization: Ohio EPA Commentor: DSW
Section #: Drwg 66FCD001-7 Pg #: NA Line #: NA Code: C
Original Comment #:
Comment: None of the changes stated in the responses to comments (DOE-0674-00) to these drawings appear to have been submitted with this package (e.g. #20, removal of proposed 18" ST).

48. Commenting Organization: Ohio EPA Commentor: DSW

Section #: 2.5 Pg #: 10 Line #: Bullet 4 Code: C
Original Comment #:
Comment: See response to comment #36 (DOE-0674-00) with respect to using matting and seeding at culvert entrances and exits.

Section 5, Operational Environmental Control Plan

49. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.4 Pg #: Line #: Code: C
Original Comment #:
Comment: Inclusion of the "Stormwater Drainage Plan (Document No. 40710-624-P622-17)" may help clarify some of the confusion regarding stormwater controls being suggested in this package.

50. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.4.2 Pg #: Line #: Code: C
Original Comment #:
Comment: As stated previously, removal and stockpiling of potential leak material is not acceptable. In situ determination is required, followed by immediate transfer to SP 7 if it is found to be above WAC.

51. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.7 Pg #: Line #: Code: C
Original Comment #:
Comment: No reference is provided for the historical flow rate. The historical flow rate must be defined if it is to be used as an action criterial

52. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.7 Pg #: Line #: Code: C
Original Comment #:
Comment: How is flow rate determined? Will a flow meter be used and if so how is it connected? Additional detail on flow rate monitoring must be provided.

53. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.7 Pg #: Line #: Code: C
Original Comment #:
Comment: A tie to the Process Control System from the flow rate monitor is needed.

54. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.7 Pg #: Line #: Code: C
Original Comment #:
Comment: The Decant Sump Tank should be pumped out prior to initiation of retrieval

operations.

Section 5.1, Environmental ALARA Plan

55. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Comment Pg #: Line #: Code: C
Original Comment #:
Comment: The design basis for the RCS appears to be theoretical, based on a small data set from bench-scale testing. If the RCS does not operate as designed, contingencies should be in place to rectify RCS problems. The design should allow for possible changes to the system.

56. Commenting Organization: Ohio EPA Commentor: HSI GeoTrans
Section #: NA Pg.#: iii Line #: 5 Code: C
Original Comment #:
Comment: The document's table of contents is inaccurate. For example, the table of contents for Section 5.1 references "ATTACHMENT 2. Environmental Control Plan" which is not in Section 5.1 but was actually in Section 5.3.

57. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: IV Pg #: 4 Line #: Item 9 Code: C
Original Comment #:
Comment: Why will treated gas not be recirculated to TTA tanks? Other portions of the RD specify that during TTA ventillation the RCS will be in recirculation mode.

58. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: V Pg #: 5 Line #: Code: C
Original Comment #:
Comment: Which variable includes "stay-time" and "surface area" factors? Are they empirically included in the Dynamic Adsorption Coefficient from the experimental data?

Section 5.2, Waste Handling Work Plan

59. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 1.3 Pg #: Line #: Code: C
Original Comment #:
Comment: This section appears to contradict other sections on residue sampling. Previously it was stated that waste would be stored in 5 gallon drums inside 55 gallon drums. Later sections state the drums will be stored within the TTA facility. This suggests storage is required for a minimum of 30 55-gallon drums. Storage must be upon an appropriate storage pad for this material. Though RCRA is not applicable to these materials it is certainly relevant and appropriate. Appropriate RCRA storage is required for the drums.

60. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 1.3 Pg #: Line #: Code: C
Original Comment #:
Comment: The section suggests the residue sample containers will be free of liquids. It is difficult to envision a sampling process that will result in liquid free samples. Additional clarification must be provided. It would seem counter productive to add the required quantity of absorbent necessary to remove free liquids from this material. DOE must reconsider the entire sampling strategy and objectives regarding the residues.

61. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 1.3 Pg #: Line #: Code: C
Original Comment #:
Comment: Ohio EPA has not found the drawing which provided details of the equipment decontamination pad. Please reference the drawing. The drawing will need to include design of the pad as well as appropriate routing of resultant waste water.

62. Commenting Organization: Ohio EPA Commentor: OFFO
Section #:3.2.3 Pg #: Line #: Code: C
Original Comment #:
Comment: Ohio EPA is unfamiliar with the radiological survey technique that will allow free release of material such as the surrogate material. Additional clarification of this should be provided. It is necessary to determine the appropriate release mechanism of this material prior to its generation in order to prevent it from having to be disposed in the OSDF.

63. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 3.2.5 Pg #: Line #: Code: C
Original Comment #:
Comment: Obviously the HEPA filters will require off-site disposal. However additional detail should be provided on packaging and storage. It is likely the filters will contain radon daughters that may result in considerable dose.

64. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 3.2.7 Pg #: Line #: Code: C
Original Comment #:
Comment: It would seem appropriate that oil filters would not be radioactive and not require on-site disposal. Unless radiologically contaminated these filters should be dispositioned off-site to an appropriate facility.

65. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 3.2.10 Pg #: Line #: Code: C

Original Comment #:
Comment: Where will these wastes be staged prior to disposal? Alternately some of the items may be usable within the controlled area of the site rather than sent to the OSDF.

66. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 3.3.3 Pg #: Line #: Code: C
Original Comment #:
Comment: These types of materials should be removed at the RMIA facility. All efforts should be made to minimize the amount of packaging material brought onto the site.

67. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 4.1 Pg #: Line #: Code: C
Original Comment #:
Comment: What basis is there for the use of "removable" markings on the drums? This seems to only present the probably of unmarked drums.

68. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 4.1 Pg #: Line #: Code: C
Original Comment #:
Comment: Considering the nature of the wastes stored in the drums all primary waste and sampling residue should be transferred to the Plant 1 Pad for appropriate storage.

69. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 4.2 Pg #: Line #: Code: C
Original Comment #:
Comment: The section references Drawing Number 05FCD014. No such drawing is included within the submittal to Ohio EPA.

Section 5.3 ARAR Compliance Matrix

70. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Comment Pg #: Line #: Code: C
Original Comment #:
Comment: 10 CFR 834 (Proposed) should be included as a TBC which includes the 0.5 pCi/L annual average fence line impact. 40 CFR 192 also includes this limit.

71. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Comment Pg #: Line #: Code: C
Original Comment #:
Comment: A method for showing that the 0.5 pCi/L annual average fence line imact is not exceeded needs to be developed and included as part RD/RA work plan. The method should include actual environmental data collected from the fence line radon monitors.

Section 8.0, Silo Penetration Plan

72. Commenting Organization: Ohio EPA Commentor: HSI GeoTrans
Section #: 2.1 Pg.#: 4 Line #: 7 Code: C
Original Comment #:
Comment: Reference to the Preliminary Hazard Analyses Report , Section 5.5, requires that no loads be placed on the silo dome in excess of 700 pounds and that equipment loads should be distributed over the largest area possible. Section 5.5 is not included in the copy of the report received so that the adequacy of the 700 pound limit cannot be verified. The work plan does minimize new loads to be placed on the existing domes, and the use of Silo Number 4 for mock installations will determine the procedures for minimizing loads on the Silo 1 and 2 domes.

73. Commenting Organization: Ohio EPA Commentor: HSI GeoTrans
Section #: 2.4.2 Pg.#: 7 Line #: 6 Code: C
Original Comment #:
Comment: Passing 1,000 cfm, the full capacity of the RCS, through first a 7/16" drilled hole and then a 12" diameter camera cut out will cause a considerable vacuum at the location and require prior knowledge and techniques for the workmen, which should be outlined in the plan. With the use of a containment structure for all but the new camera penetrations, the designed negative pressure system should be adequate to prevent a release of contaminants to the outside atmosphere.

74. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.4.2 Pg #: Line #: Code: C
Original Comment #:
Comment: Figure #1 states that filtered air will be going into the containment structure whereas Section 2.4.2 says that fresh air will be brought in through portals. Please clarify.

75. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Drwg SKFMDO12 Pg #: Line #: Code: C
Original Comment #:
Comment: The figure shows the core will be cut without a cable attached to the eyebolt. What will keep the concrete core from falling into the silo?

76. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.11 Pg #: 9 Line #: Code: C
Original Comment #:
Comment: The ROD stipulates that all wastes from the silos will NOT be free-released and will be disposed of at an off-site facility permitted to receive silo wastes.

77. Commenting Organization: Ohio EPA Commentor: HSI GeoTrans

Section #: NA Pg.#: Drawing # SKFMD012 Line #: NA Code: C
Original Comment #:
Comment: With regard to Note #2 on the referenced drawing, the word "hole" should precede "completely.....".

Appendix A

78. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Comment Pg #: Line #: Code: C
Original Comment #:
Comment: A number of drawings have been stamped "VOID". We are not sure why these drawings were included.

79. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Drwg 10FMD009 Pg #: Line #: Code: C
Original Comment #:
Comment: This drawing depicts the direct discharge of waste water resulting from FSMS to a stream. Such a discharge is unacceptable. All waste water must undergo proper treatment and discharge through an appropriate NPDES point.

Appendix C

80. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: DWG 20FMD001 Pg #: Line #: Code: C
Original Comment #:
Comment: Stream #4, Air (lbs/hr) should be 2162 not 2161.

81. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: DWG 20FMD001 Pg #: Line #: Code: C
Original Comment #:
Comment: It does not appear that allowances for the warming of the air after the chiller.

Appendix D

82. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Contents Pg #: Line #: Code: C
Original Comment #:
Comment: The page numbering for the Decant Sump Waste Retrieval and TTA is incorrect.

83. Commenting Organization: Ohio EPA Commentor: HSI GeoTrans
Section #: 3.0 Pg.#: 10 Line #: 4 Code: C
Original Comment #:
Comment: A reference is made to two documents, "Functional Requirements Document (624-P622-

02)" and "Design Criteria Package (624-P622-03)". These documents may or may not provide structural calculations and design assumptions for the bridge truss structure, and indicate that overturning moment due to wind has been evaluated for the entire bridge truss with all the equipment in place. Drawings detailing the structural steel members of the bridge truss were not found in this report or the drawings that accompanied it. The structural documentation contained in this report appears to be limited to discussions of the EMMA deployment tower system (Appendix F, page 17) and the mast for the EMMA manipulator (Appendix F, page 26).

84. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 4.2 Pg #: 23 Line #: Code: C
Original Comment #:
Comment: The fans and ducting system should be dynamic enough to prevent overpressurization of the silos.

85. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 4.3.1 Pg #: Line #: Code: C
Original Comment #:
Comment: The text here states "if the level rises" a tanker will begin removal. Previous sections refer to flow rate as an action criteria as well percent of full. This section as well as other addressing the decant sump must be revised.

86. Commenting Organization: Ohio EPA Commentor: OFFO
Section #:4.3.1 Pg #: Line #: Code: C
Original Comment #:
Comment: At what point will the pad be poured over the Decant Sump Tank? It would seem appropriate to pour the pad prior to initiating Silo removal to facilitate monitoring and emergency emptying of the tank.

87. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 4.3.1 Pg #: Line #: Code: C
Original Comment #:
Comment: Neither this section nor the contingency plan address how DOE will respond to the situation where flow into the decant sump significantly increases resulting in potential releases from the tank. Ohio EPA believes this is a likely scenario and that a plan for addressing higher flows into the tank should be developed prior to initiating waste retrieval.

88. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 4.3.1 Pg #: Line #: Code: C
Original Comment #:
Comment: The section needs to describe the process for getting wastes from within the vacuum truck into the TTA tanks. Provide a flow diagram and drawings of the connection

equipment.

89. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 4.4.1 Pg #: Line #: Code: C
Original Comment #:
Comment: A plan detailing the FSMS methods and objectives will need to be submitted to the agencies for review prior to initiation. Additionally how will information from the FSMS be incorporated into the RD/RA documentation and implementation.

90. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 4.7 (9) Pg #: Line #: Code: C
Original Comment #:
Comment: Ground discharge of any waste water is not acceptable. Remove reference to such. Water from the FSMS will require treatment through the AWWT or similar facility prior to discharge through an appropriate NPDES point.

Appendix E

91. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Comment Pg #: Line #: Code: C
Original Comment #:
Comment: The set and operartion of the radon monitors and high volume samplers needs to commence as soon as possible to allow for the gathering of baseline data. Provide a schedule for the installation of the referenced monitors and samplers.

92. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 3.1.4 Pg #: 4 of 7 Line #: Code: C
Original Comment #:
Comment: Submicron particualte sampling and/or treatment needs to be evaluated as part of the Silo 3 remediation.

93. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 4.0 Pg #: 6 of 7 Line #: Code: C
Original Comment #:
Comment: The four additional monitoring locations for radon and particulates *will* be reported through the IEMP quarterly status reports.

94. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: DWG 94X-5500-G-02259 Pg #: Line #: Code: C
Original Comment #:
Comment: The monitoring location designation on the drawing does not match the location names

in the test. Revise accordingly.

Appendix H

95. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2 Pg #: 4 Line #: Code: C
Original Comment #:
Comment: The text states,"Acceptable ranges of operation are 0.5 to -2 inches water guage". This is not an acceptable range of operation. OEPA recognizes there may be momentary upset conditions that may fall within this range, but expects the silo pressure to be maintained between 0.0 to -1.0 inches water guage.

96. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 11 Pg #: 27 Line #: Code: C
Original Comment #:
Comment: The text states that the "entire system" will shut down on high-high radon alarm. Is the "entire system" the RCS or the whole AWR?